SA-VF700ED

SERVICE MANUAL

Ver 1.0 2003.07

US Model
Canadian Model
AEP Model
UK Model

SA-VF700ED is front speaker system in SA-VS700ED.

SPECIFICATIONS

For the U.S. model
AUDIO POWER SPECIFICATIONS
POWER OUTPUT AND TOTAL HARMONIC DISTORTION:
With 3 ohms loads both subwoofer driven, from 20 - 200 Hz; rated 250 watts minimum RMS power, with no more than 0.8% total harmonic distortion from 250 milliwatts to rated output.

SA-VF700ED

Speaker system	2 way and built-in subwoofer
Speaker units Subwoofer:	11 cm (4 3/8 in.), cone type
	Woofer: 8 cm (3 1/4 in.), cone type
	Tweeter: 2.5 cm (1 in.), dome type
Enclosure type	Bass reflex
Rated impedance	8 ohms
Power handling capacity	
Maximum input power:	170 watts
Sensitivity level	88 dB (1 W, 1 m)
Frequency range	20 Hz - 70,000 Hz

Inputs
LINE IN: input pin jack
SPEAKER IN: speaker cord

General

Power requirements	US, CND model:120 V AC, 60 Hz
	AEP, UK model :220 -230 V AC, 50/60 Hz
Power consumptions	250 W
	1 W (standby mode)
Dimensions (w/h/d)	Approx. 300 x 1,200 x 300 mm
	(11 7/8 x 47 1/4 x 11 7/8 in.)
Mass	AMP SIDE: Approx. 16.7 kg
	(36 lb 13.07 oz)
	NON AMP SIDE: Approx. 15.0 kg
	(33 lb 1.11 oz)

Supplied accessories
Audio connecting cord, 5 m (16 ft 1/2 in.) (1)
Subwoofer connecting cord, 5m (16 ft 1/2 in.) (1)
Speaker connecting cords, 5 m (16 ft 1/2 in.) (2)

Design and specifications are subject to change without notice.

HOME THEATER SPEAKER SYSTEM

9-961-024-01
2003G02-1
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Sony Corporation
Home Audio Company
Published by Sony Engineering Corporation

SONY®

SAFETY CHECK-OUT

After correcting the original service problem, perform the following safety checks before releasing the set to the customer: Check the antenna terminals, metal trim, "metallized" knobs, screws, and all other exposed metal parts for AC leakage. Check leakage as described below.

LEAKAGE

The AC leakage from any exposed metal part to earth Ground and from all exposed metal parts to any exposed metal part having a return to chassis, must not exceed 0.5 mA (500 microampers). Leakage current can be measured by any one of three methods.

1. A commercial leakage tester, such as the Simpson 229 or RCA WT-540A. Follow the manufacturers' instructions to use these instruments.

2. A battery-operated AC milliammeter. The Data Precision 245 digital multimeter is suitable for this job.

3. Measuring the voltage drop across a resistor by means of a VOM or battery-operated AC voltmeter. The "limit" indication is 0.75 V, so analog meters must have an accurate low-voltage scale. The Simpson 250 and Sanwa SH-63Trd are examples of a passive VOM that is suitable. Nearly all battery operated digital multimeters that have a 2V AC range are suitable. (See Fig. A)

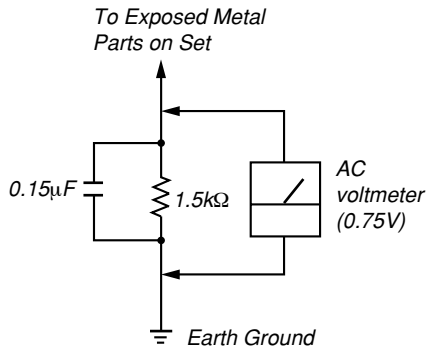


Fig. A. Using an AC voltmeter to check AC leakage.

TABLE OF CONTENTS

Specifications 1

1. GENERAL 3

2. SERVICING NOTES
2-1. Service Position For Power Board 3
2-2. Service Position For Control Board 4
2-3. Wire Stopper 4

3. DISASSEMBLY
3-1. Ring ASSY, Grill Frame (Front) ASSY 5
3-2. Bottom Section 6
3-3. Subwoofer (SP103) 7

4. DIAGRAMS
4-1. Circuit Boards Location 9
4-2. Schematic Diagram – Control Section – 10
4-3. Printed Wiring Boards – Control Section – 11
4-4. Schematic Diagram – Power Section – 12
4-5. Printed Wiring Boards – Power Section (Side A) – 13
Printed Wiring Boards – Power Section (Side B) – 14

5. EXPLODED VIEWS
5-1. Base Section (L-CH) 15
5-2. Speaker Section (L-CH) 16
5-3. Bottom Section (L-CH) 17
5-4. Bottom Section (R-CH) 18
5-5. Speaker Section (R-CH) 19

6. ELECTRICAL PARTS LIST 20

SAFETY-RELATED COMPONENT WARNING!!

COMPONENTS IDENTIFIED BY MARK ⚠ OR DOTTED LINE WITH MARK ⚠ ON THE SCHEMATIC DIAGRAMS AND IN THE PARTS LIST ARE CRITICAL TO SAFE OPERATION. REPLACE THESE COMPONENTS WITH SONY PARTS WHOSE PART NUMBERS APPEAR AS SHOWN IN THIS MANUAL OR IN SUPPLEMENTS PUBLISHED BY SONY.

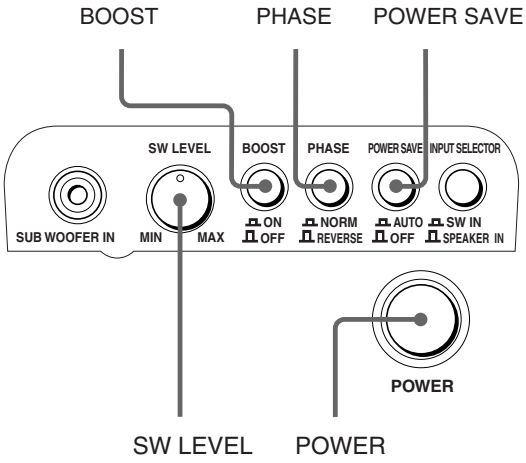
ATTENTION AU COMPOSANT AYANT RAPPORT À LA SÉCURITÉ!!

LES COMPOSANTS IDENTIFIÉS PAR UNE MARQUE ⚠ SUR LES DIAGRAMMES SCHÉMATIQUES ET LA LISTE DES PIÈCES SONT CRITIQUES POUR LA SÉCURITÉ DE FONCTIONNEMENT. NE REMPLACER CES COMPOSANTS QUE PAR DES PIÈCES SONY DONT LES NUMÉROS SONT DONNÉS DANS CE MANUEL OU DANS LES SUPPLÉMENTS PUBLIÉS PAR SONY.

SECTION 1
GENERAL

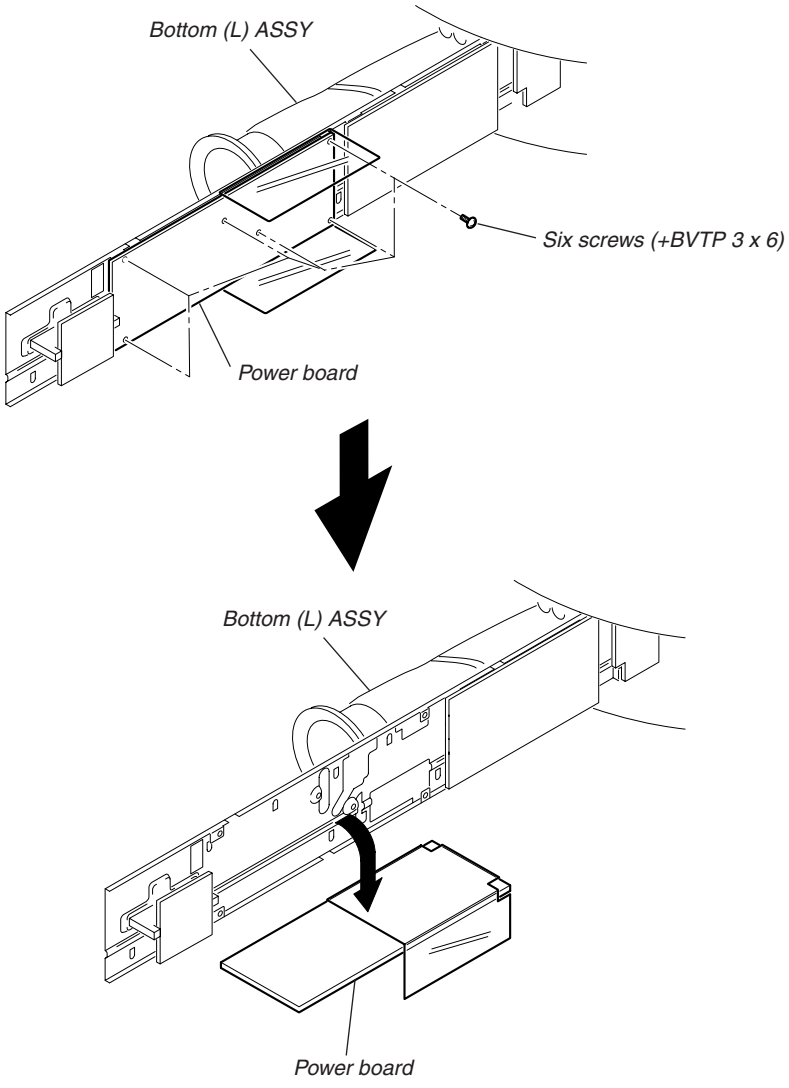
This section is extracted from instruction manual.

• Location of controls

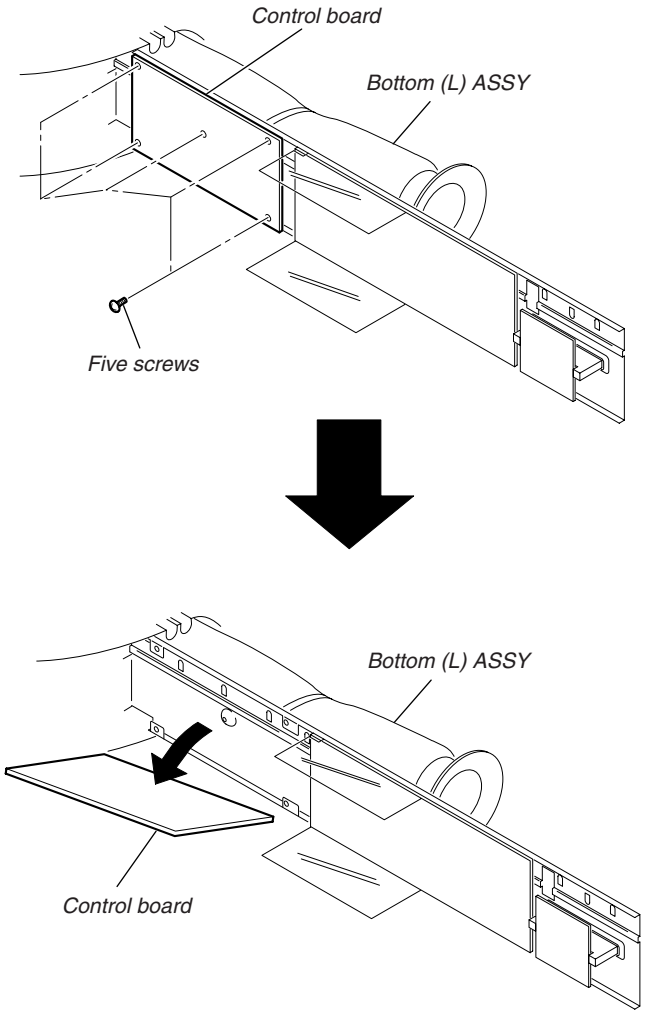


SECTION 2
SERVICING NOTES

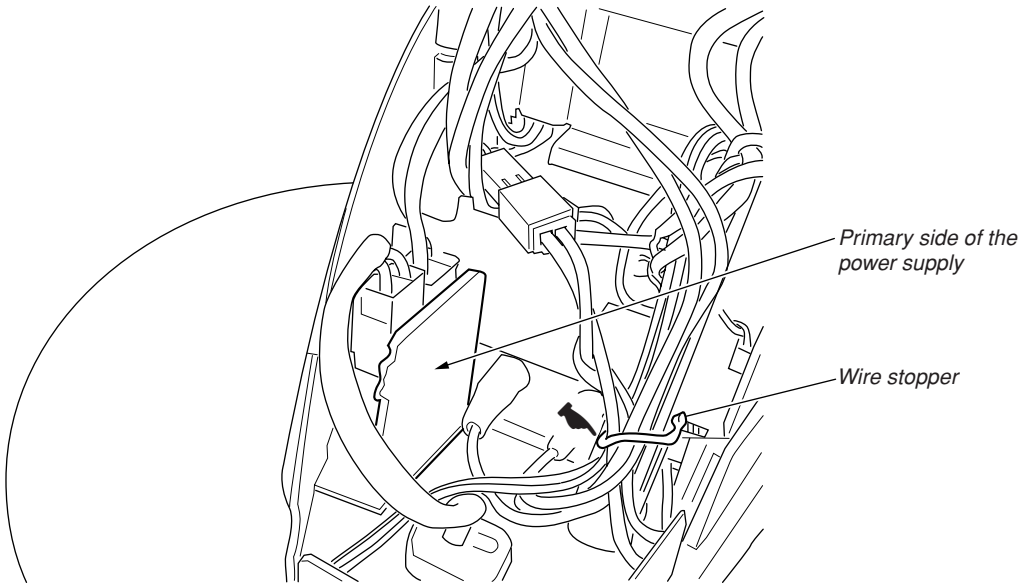
2-1. SERVICE POSITION FOR POWER BOARD



2-2. SERVICE POSITION FOR CONTROL BOARD



2-3. WIRE STOPPER



Secure the wires not to touch the primary side of the power supply.

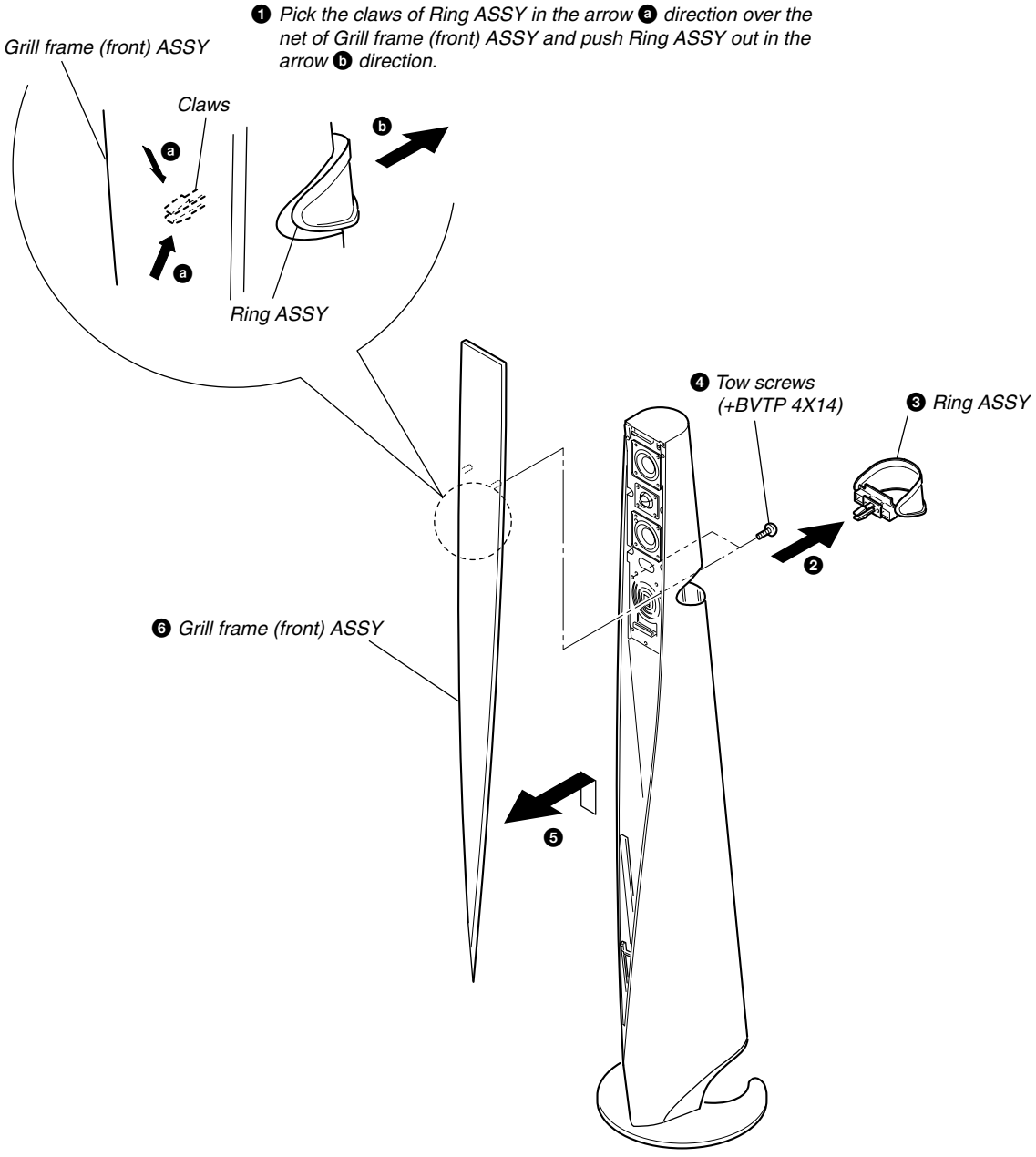
SECTION 3
DISASSEMBLY

Be careful not to break the tweeter cone, because it is so thin.

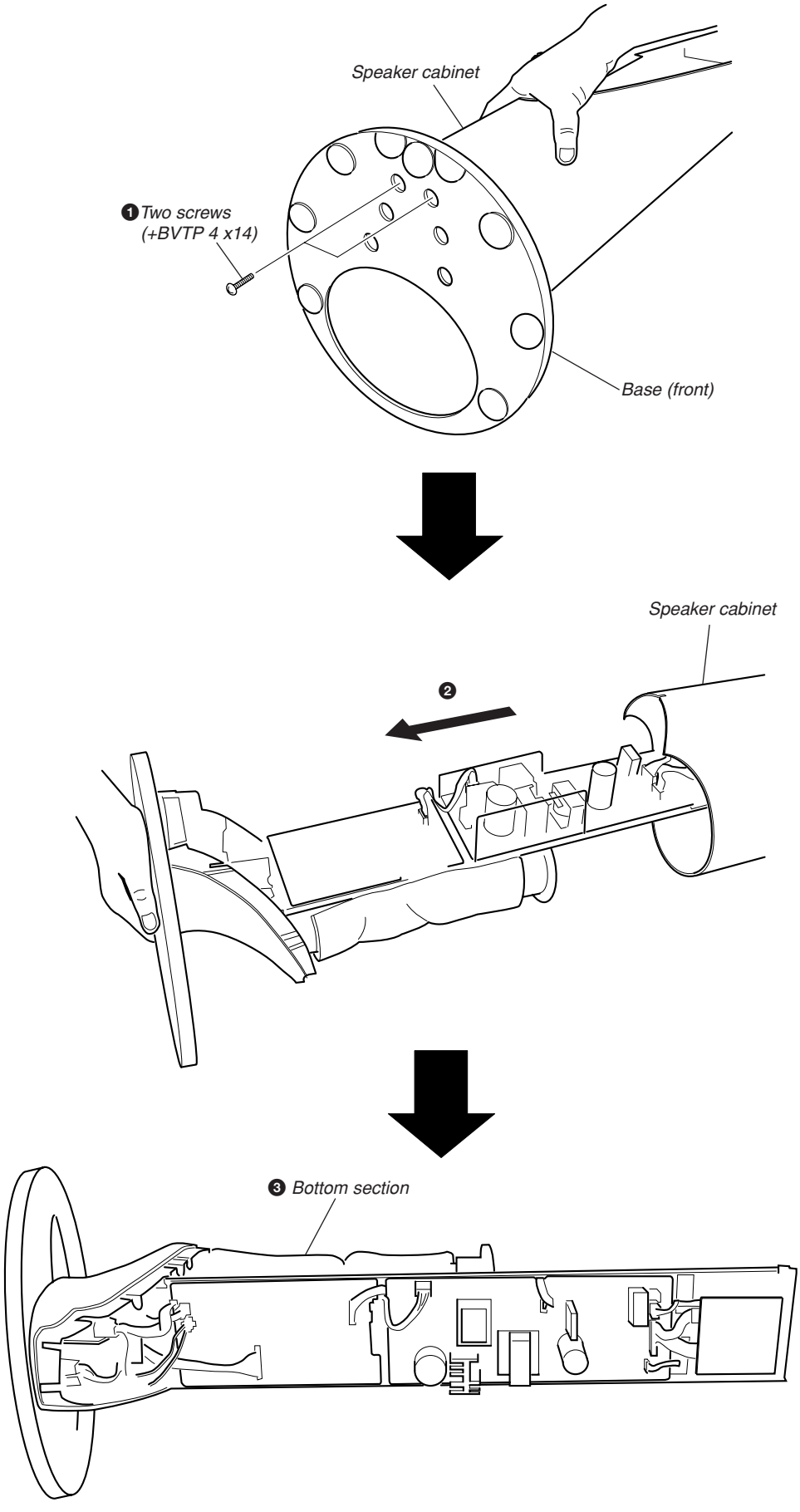
Set ➡ Ring ASSY, Grill frame (front) ASSY ➡ Bottom section ➡ Subwoofer (SP103)

Note : Follow the disassembly procedure in the numerical order given.

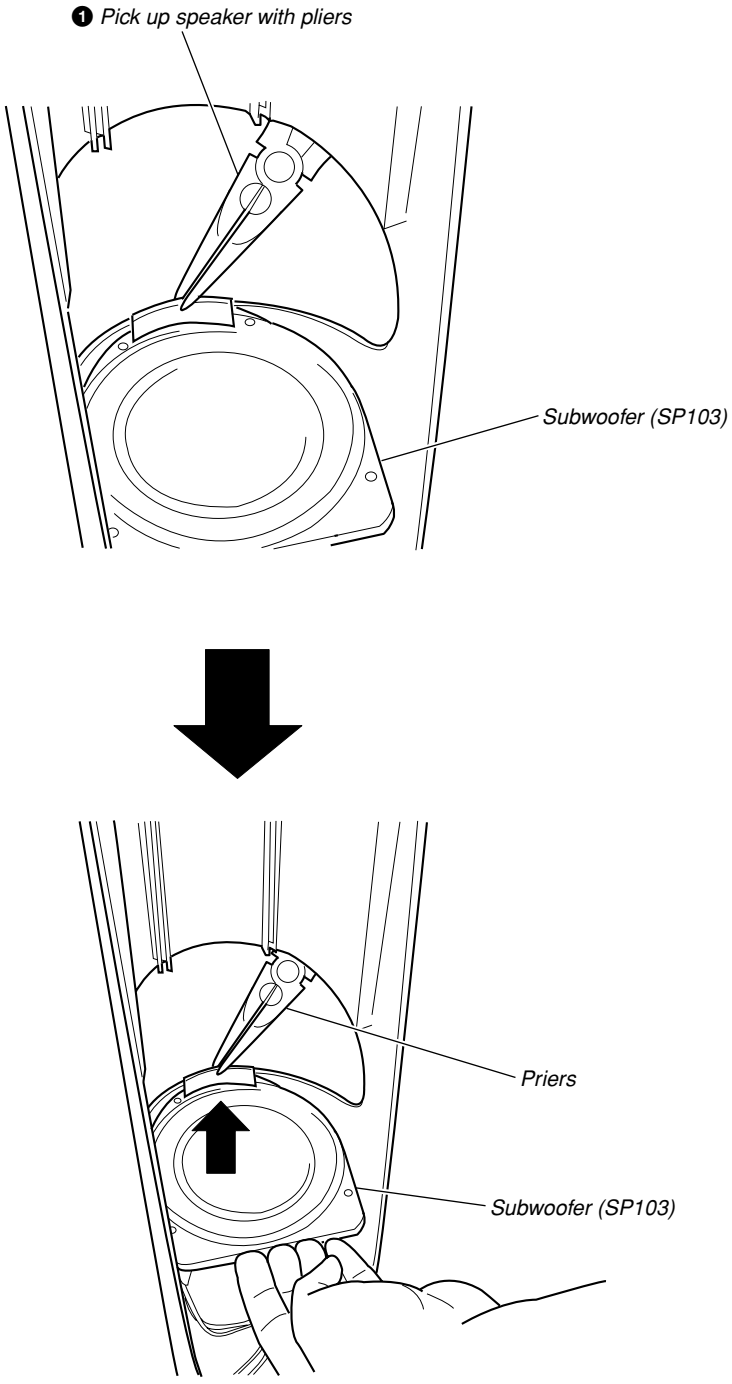
3-1. RING ASSY, GRILL FRAME (FRONT) ASSY


❶ Pick the claws of Ring ASSY in the arrow ⓐ direction over the net of Grill frame (front) ASSY and push Ring ASSY out in the arrow ⓑ direction.
Grill frame (front) ASSY
Claws
ⓐ
ⓑ
Ring ASSY
❹ Tow screws (+BVTP 4X14)
❸ Ring ASSY
❷
❻ Grill frame (front) ASSY
❺

3-2. BOTTOM SECTION



3-3. SUBWOOFER (SP103)



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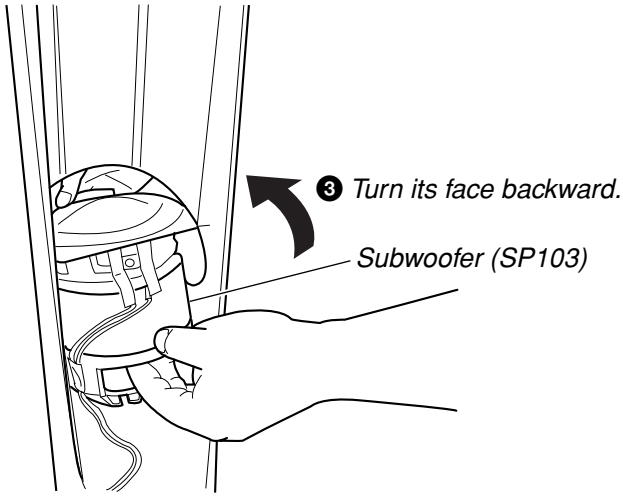
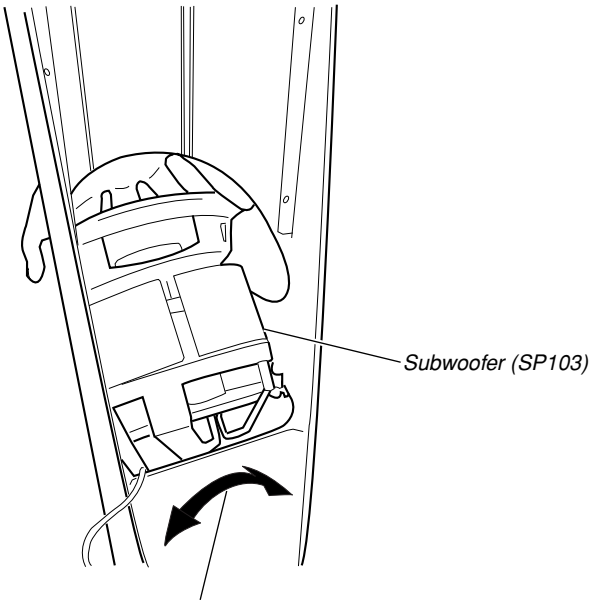
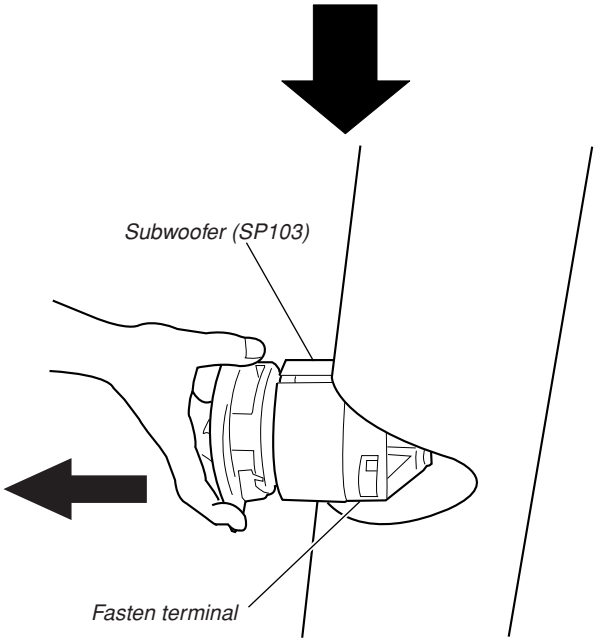




❹ *Find the direction of woofer unit not to touch the cabinet by turning it.*



❺ *Set it to the direction the fasten terminal is on the side and take it out of cabinet.*

SECTION 4
DIAGRAMS

THIS NOTE IS COMMON FOR PRINTED WIRING BOARDS AND SCHEMATIC DIAGRAMS.
(In addition to this, the necessary note is printed in each block.)

For Printed Wiring Boards.
Note :

- ○——— : parts extracted from the component side.
- ●——— : parts extracted from the conductor side.
- ▬ : Pattern from the side which enables seeing.

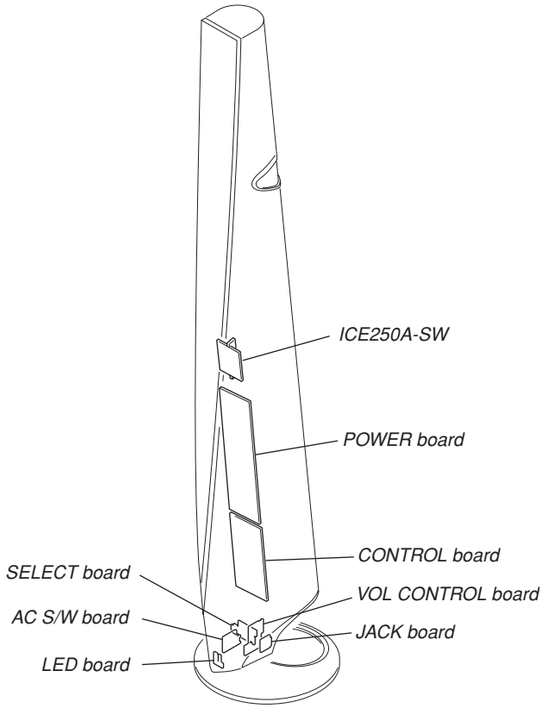
For Schematic Diagrams.
Note:

- All capacitors are in μF unless otherwise noted. pF: μμF 50 WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in Ω and 1/4 W or less unless otherwise specified.
- ▭ : panel designation.

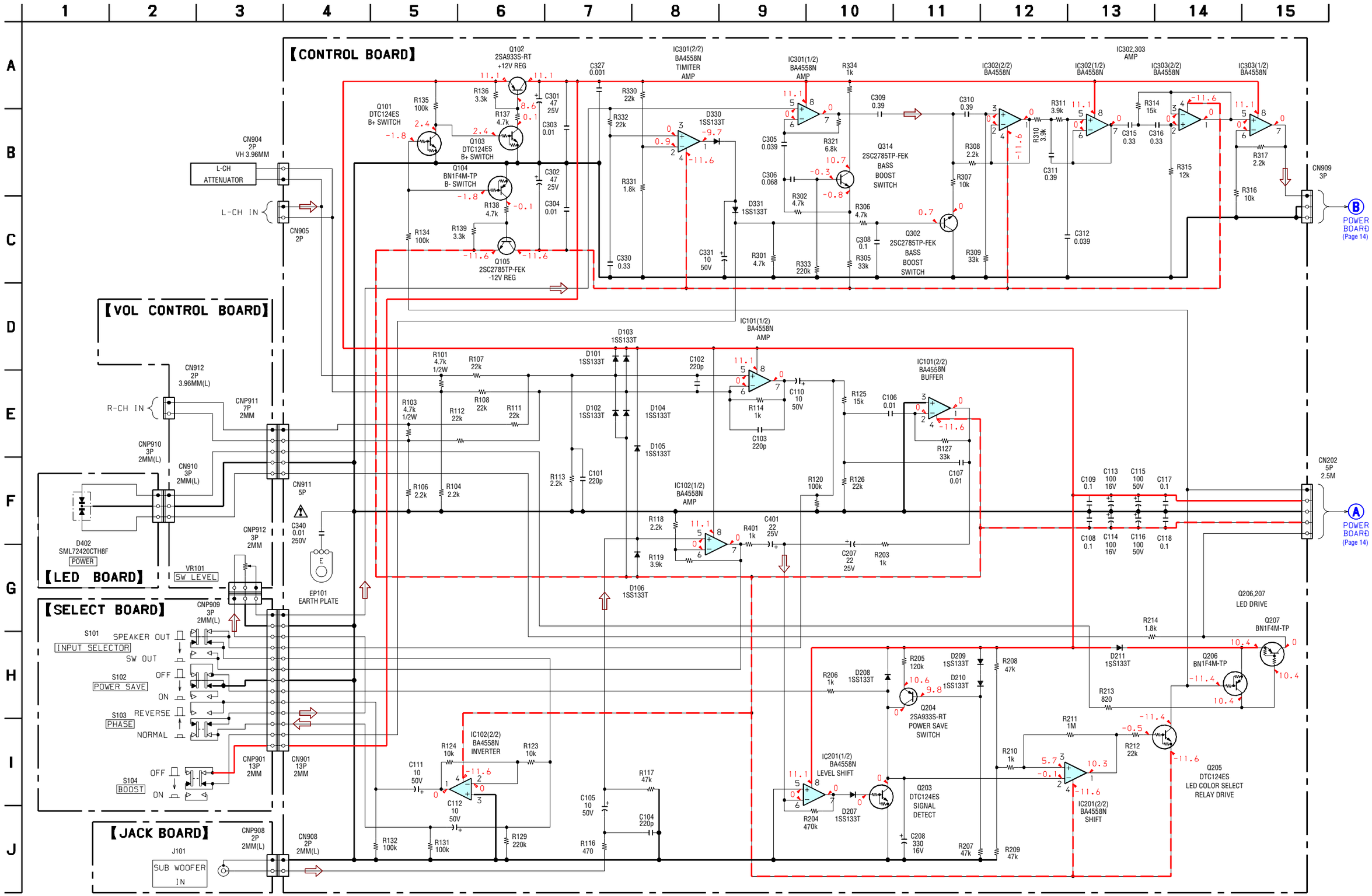
Note:	**Note:**
The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety. Replace only with part number specified.	Les composants identifiés par une marque ⚠ sont critiques pour la sécurité. Ne les remplacer que par une piéce portant le numéro spécifié.

- ▬▬ : B+ Line.
- ▬ ▬ ▬ : B– Line.
- Voltages are dc with respect to ground under no-signal conditions.
- no mark : Power on
- Voltages are taken with a VOM (Input impedance 10 MΩ).
  Voltage variations may be noted due to normal production tolerances.
- Signal path.
  ⇨ : AUDIO
- Abbreviation
  CND : Canadian model

4-1. CIRCUIT BOARDS LOCATION

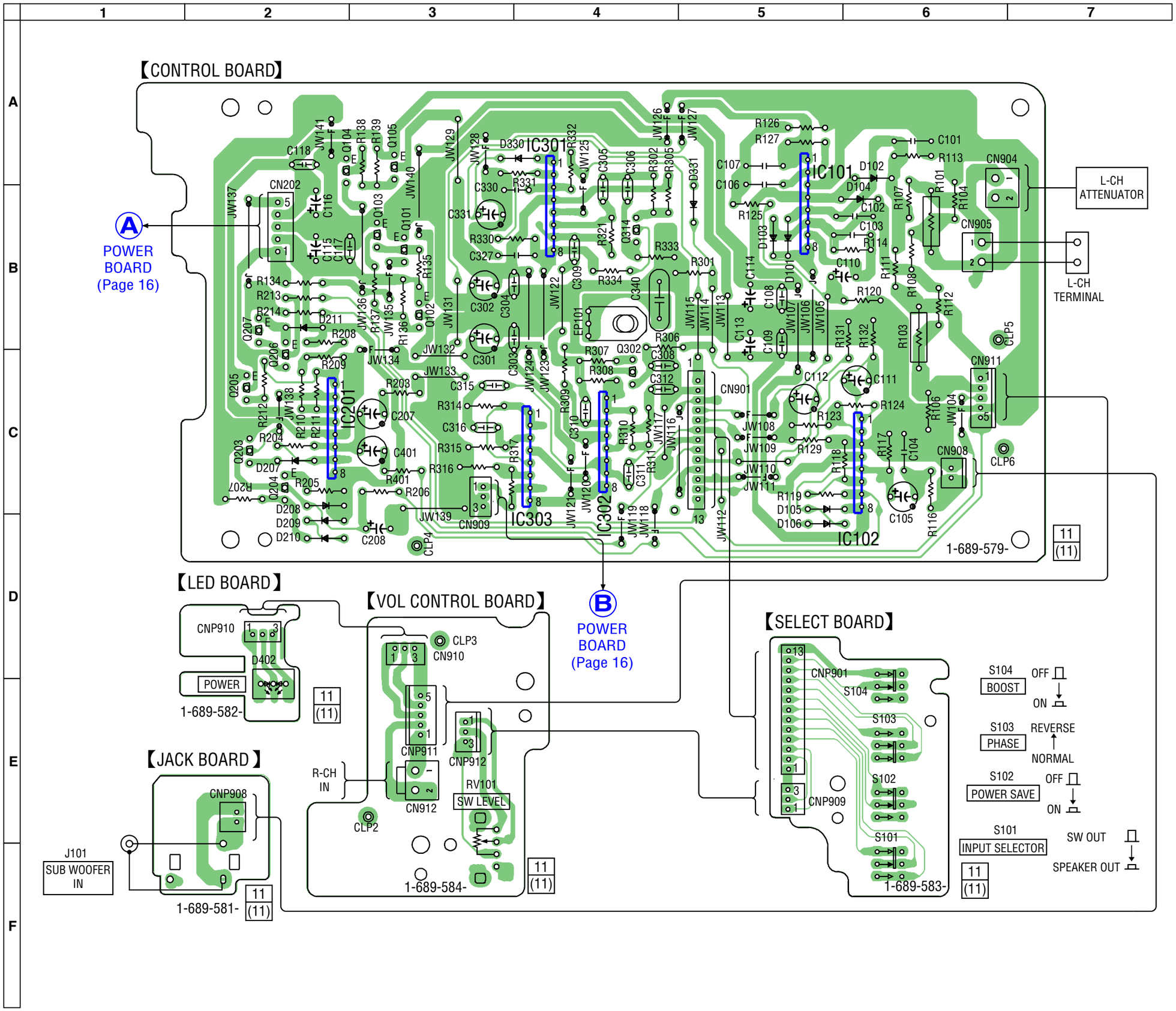


4-2. SCHEMATIC DIAGRAM – CONTROL SECTION –



4-3. PRINTED WIRING BOARDS – CONTROL SECTION –

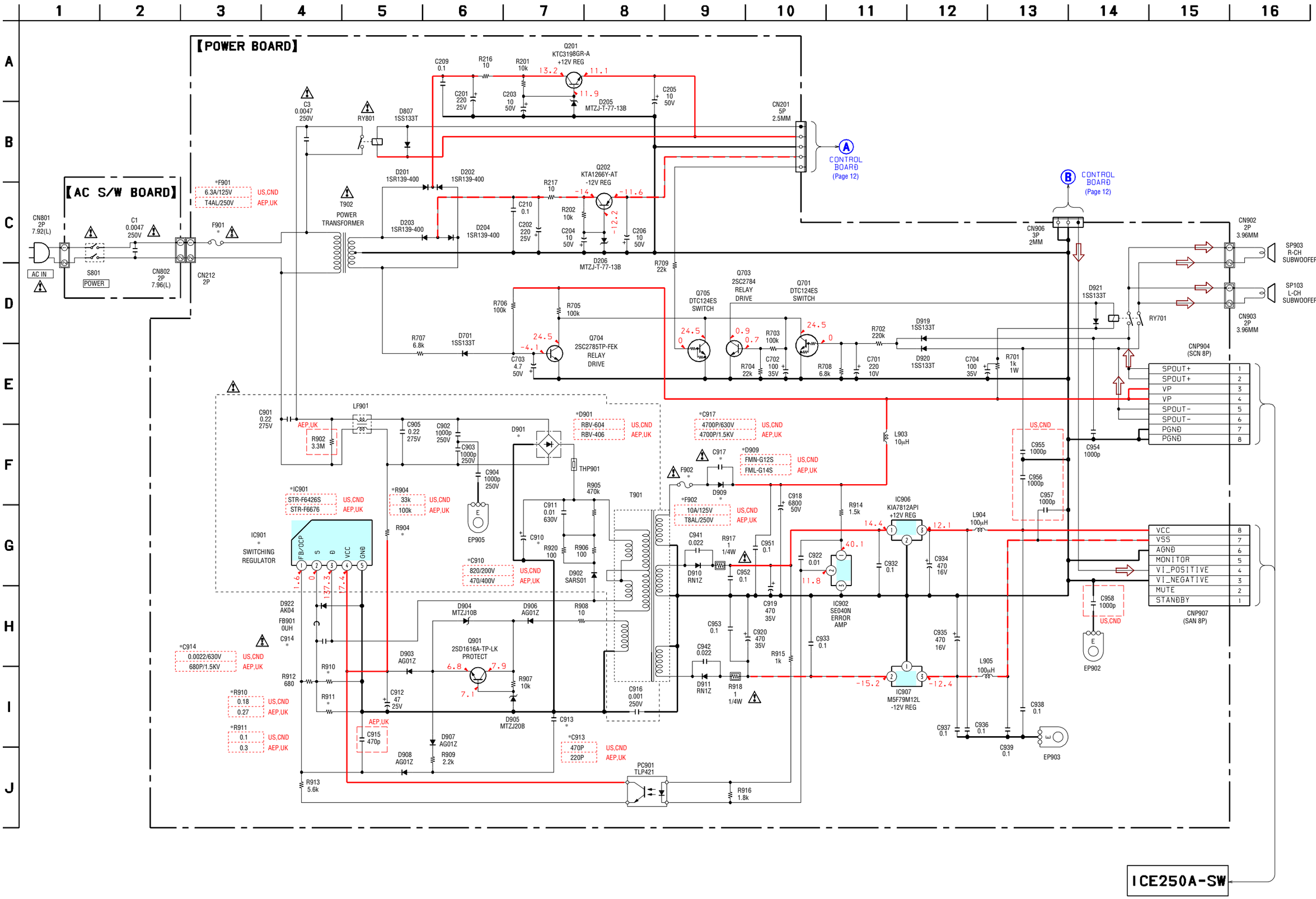
● See page 9 for Circuit Boards Location.



● **Semiconductor Location**

Ref. No.	Location
D101	B-5
D102	A-6
D103	B-5
D104	B-6
D105	C-5
D106	D-5
D207	C-2
D208	C-2
D209	D-2
D210	D-2
D211	B-2
D330	A-4
D331	B-5
D402	E-2
IC101	A-5
IC102	C-6
IC201	C-2
IC301	A-4
IC302	C-4
IC303	C-4
Q101	B-3
Q102	B-3
Q103	B-3
Q104	A-2
Q105	A-3
Q203	C-2
Q204	C-2
Q205	C-2
Q206	B-2
Q207	B-2
Q302	C-4
Q314	B-4

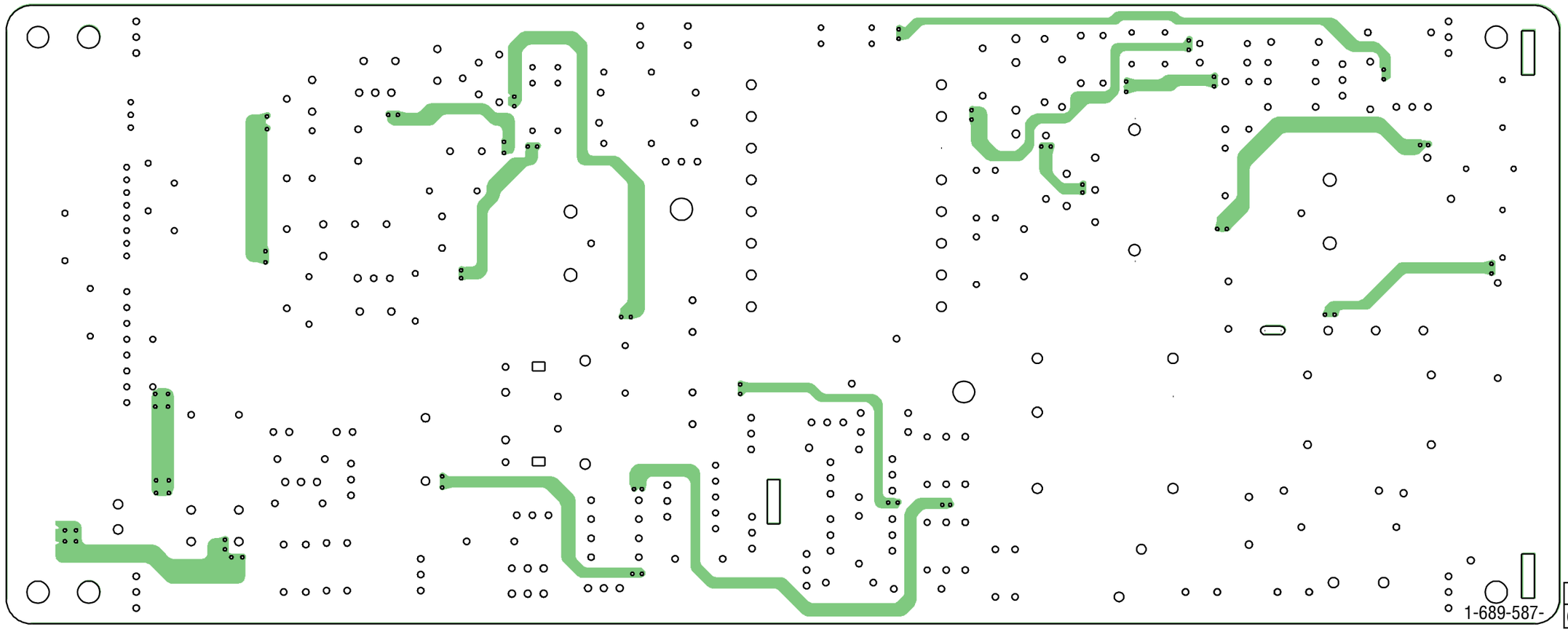
4-4. SCHEMATIC DIAGRAM – POWER SECTION –



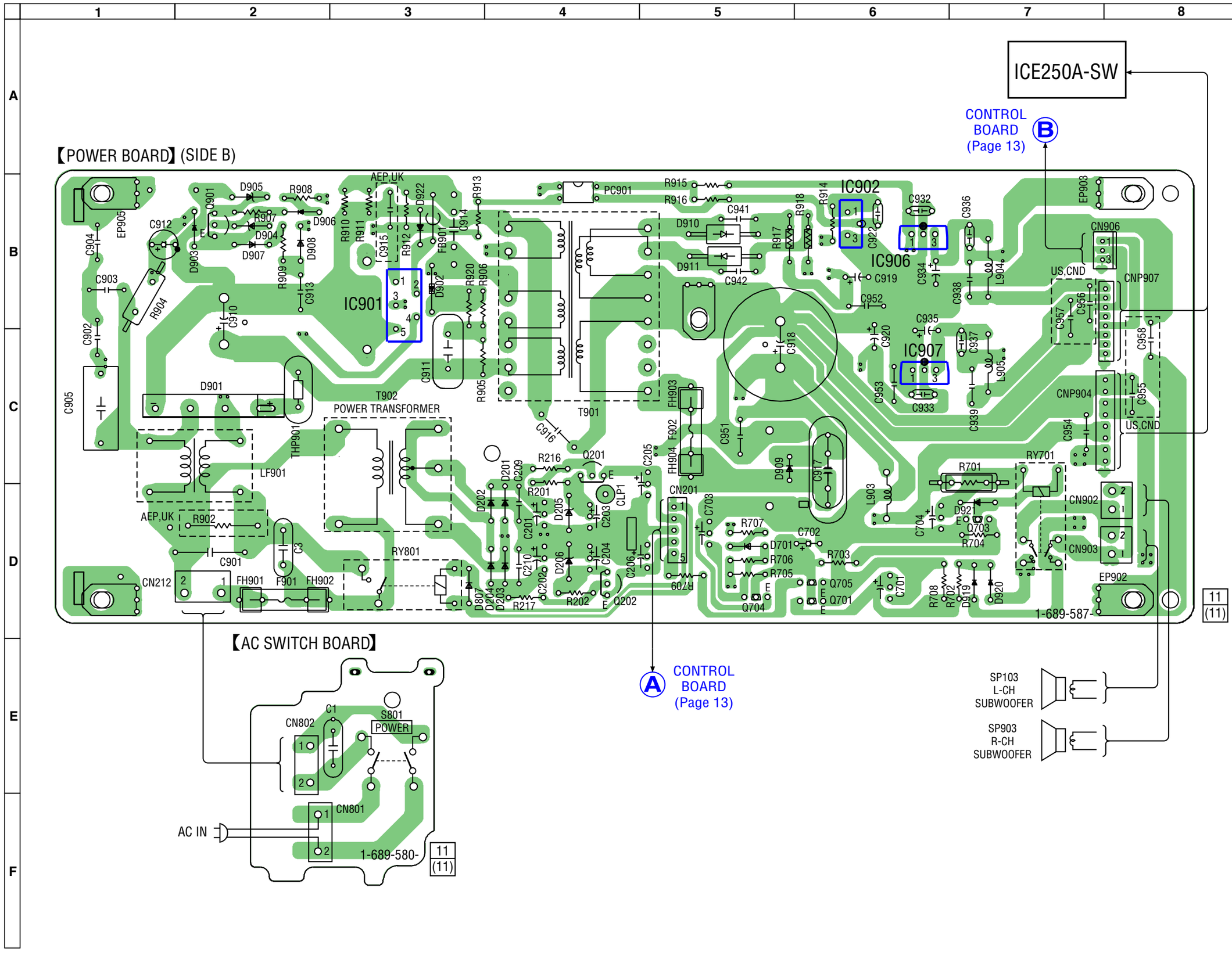
4-5. PRINTED WIRING BOARDS – POWER SECTION (SIDE A) –

● See page 9 for Circuit Boards Location.

【POWER BOARD】
(SIDE A)



PRINTED WIRING BOARDS – POWER SECTION (SIDE B) – ● See page 9 for Circuit Boards Location.



● **Semiconductor Location**

Ref. No.	Location
D201	D-4
D202	D-4
D203	D-4
D204	D-4
D205	D-4
D206	D-4
D701	D-5
D807	D-3
D901	C-2
D902	B-3
D903	B-2
D904	B-2
D905	B-2
D906	B-2
D907	B-2
D908	B-2
D909	C-5
D910	B-5
D911	B-5
D919	D-7
D920	D-7
D921	D-7
D922	B-3
IC901	B-3
IC902	B-6
IC906	B-6
IC907	C-6
Q201	C-4
Q202	D-4
Q701	D-6
Q703	D-7
Q704	D-5
Q705	D-5
Q901	B-2

SECTION 5
EXPLODED VIEWS

NOTE :

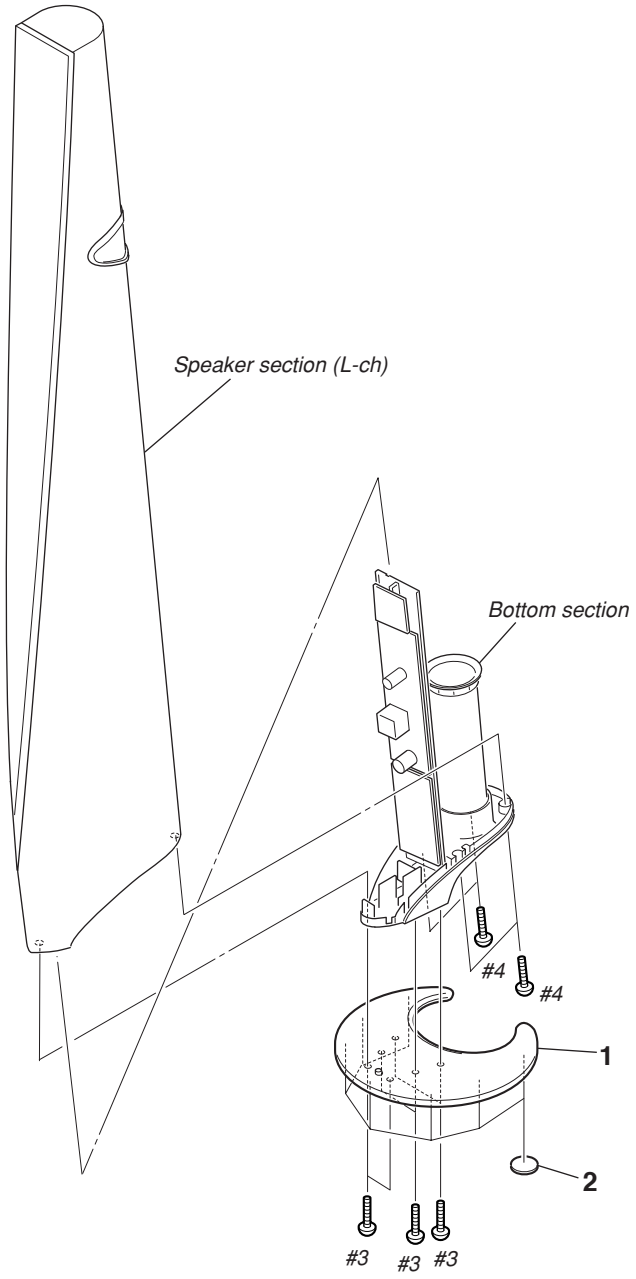
- -XX, -X mean standardized parts, so they may have some difference from the original one.
- Color indication of Appearance Parts
  Example :
  KNOB, BALANCE (WHITE) … (RED)
  ↑ ↑
  Parts color Cabinet's color
- Items marked " * "are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- The mechanical parts with no reference number in the exploded views are not supplied.
- Hardware (# mark) list and accessories and packing materials are given in the last of this parts list.
- Abbreviation
  CND : Canadian model

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

Les composants identifiés par une marque ⚠ sont critiques pour la sécurité.
Ne les remplacer que par une piéce portant le numéro spécifié.

5-1. BASE SECTION

L-CH

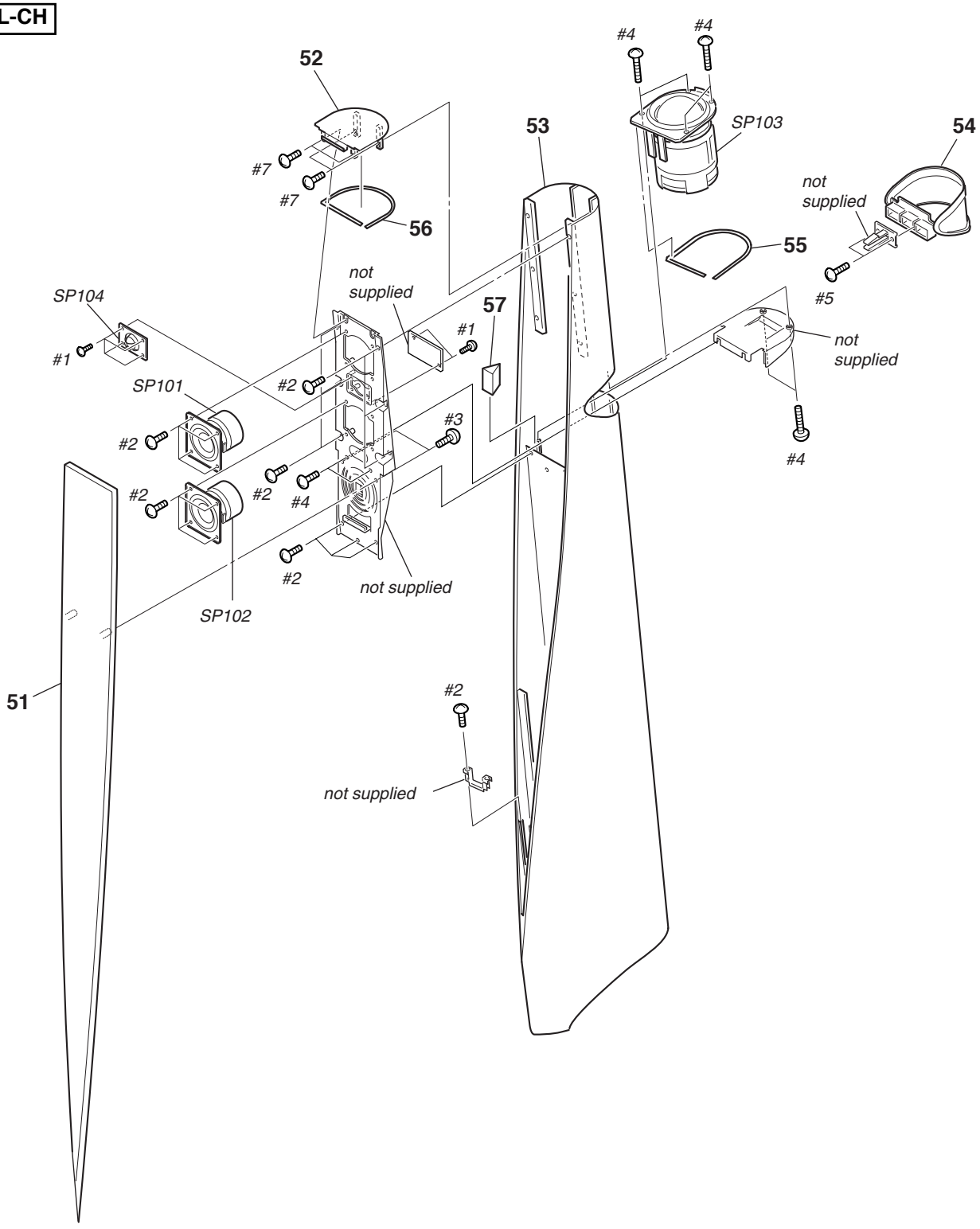


Ref. No.	Part No.	Description	Remark
1	4-250-004-01	BASE (FRONT)	
2	4-250-005-01	FOOT (FRONT)	

Ref. No.	Part No.	Description	Remark
#3	7-685-662-79	SCREW +BVTP 4X14 TYPE2 N-S	
#4	7-685-665-79	SCREW +BVTP 4X25 TYPE2 N-S	

5-2. SPEAKER SECTION

L-CH

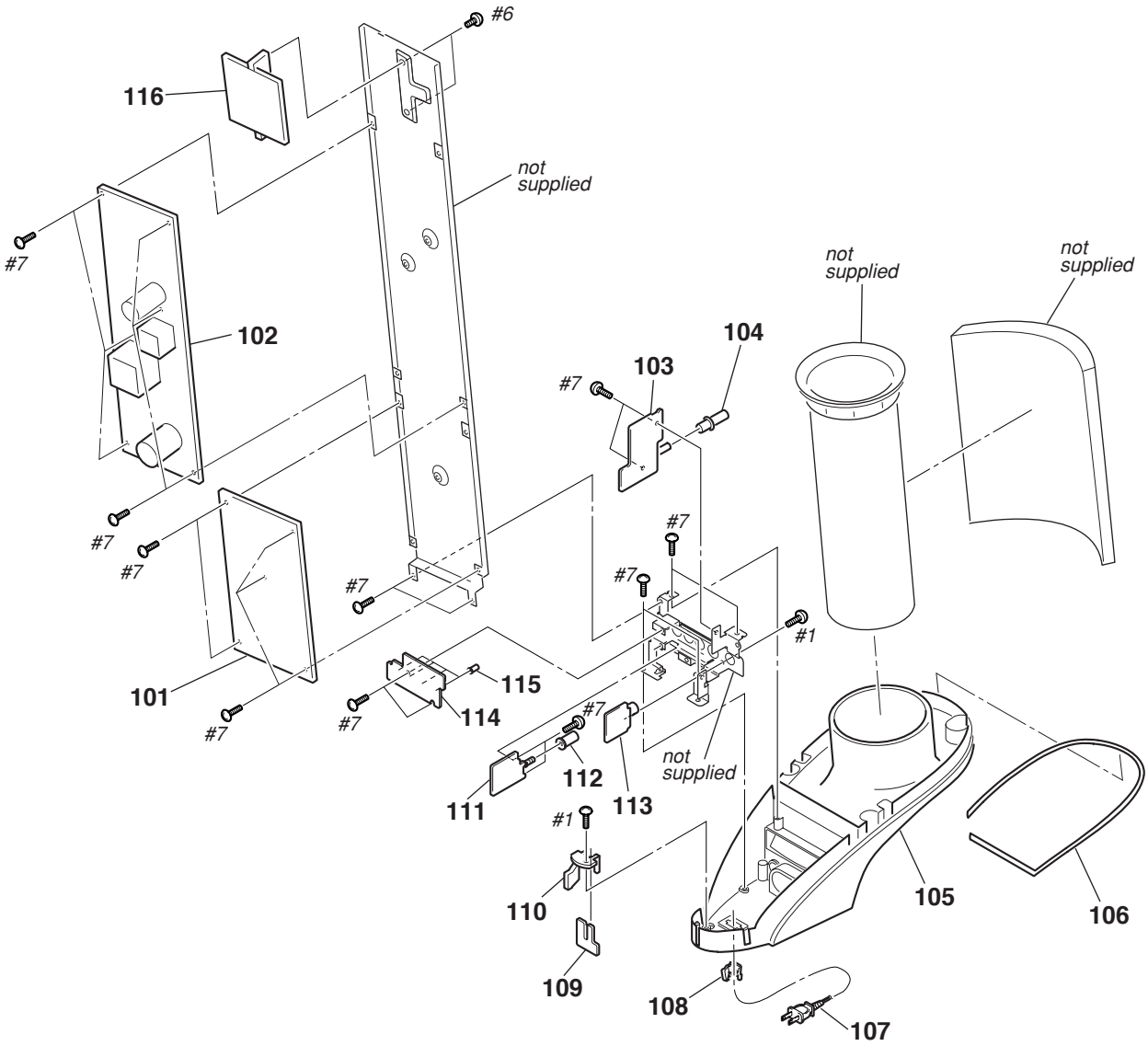


Ref. No.	Part No.	Description	Remark
51	X-4955-918-1	FRAME (FRONT) ASSY, GRILL (US,CND)	
51	X-4955-982-1	FRAME (FRONT) ASSY, GRILL (AEP,UK)	
52	4-250-018-01	TOP PANEL	
53	4-250-012-01	SPEAKER CABINET (L)	
54	X-4955-919-1	RING ASSY	
55	4-250-016-01	CUSHION (SW)	
56	4-250-019-01	CUSHION (TOP)	
57	4-250-022-01	PACKING (SW)	
SP101	1-825-556-11	SPEAKER (8cm)	
SP102	1-825-556-11	SPEAKER (8cm)	

Ref. No.	Part No.	Description	Remark
SP103	1-825-557-11	SPEAKER (11cm)	
SP104	1-825-558-11	SPEAKER (2.5cm)	
#1	7-685-647-79	SCREW +BVTP 3X10 TYPE2 IT-3	
#2	7-685-660-19	SCREW +BVTP 4X10 TYPE2 N-S	
#3	7-685-662-79	SCREW +BVTP 4X14 TYPE2 N-S	
#4	7-685-665-79	SCREW +BVTP 4X25 TYPE2 N-S	
#5	7-685-661-19	SCREW +BVTP 4X12 TYPE2 N-S	
#7	7-685-645-79	SCREW +BVTP 3X6 TYPE2 N-S	

5-3. BOTTOM SECTION

L-CH

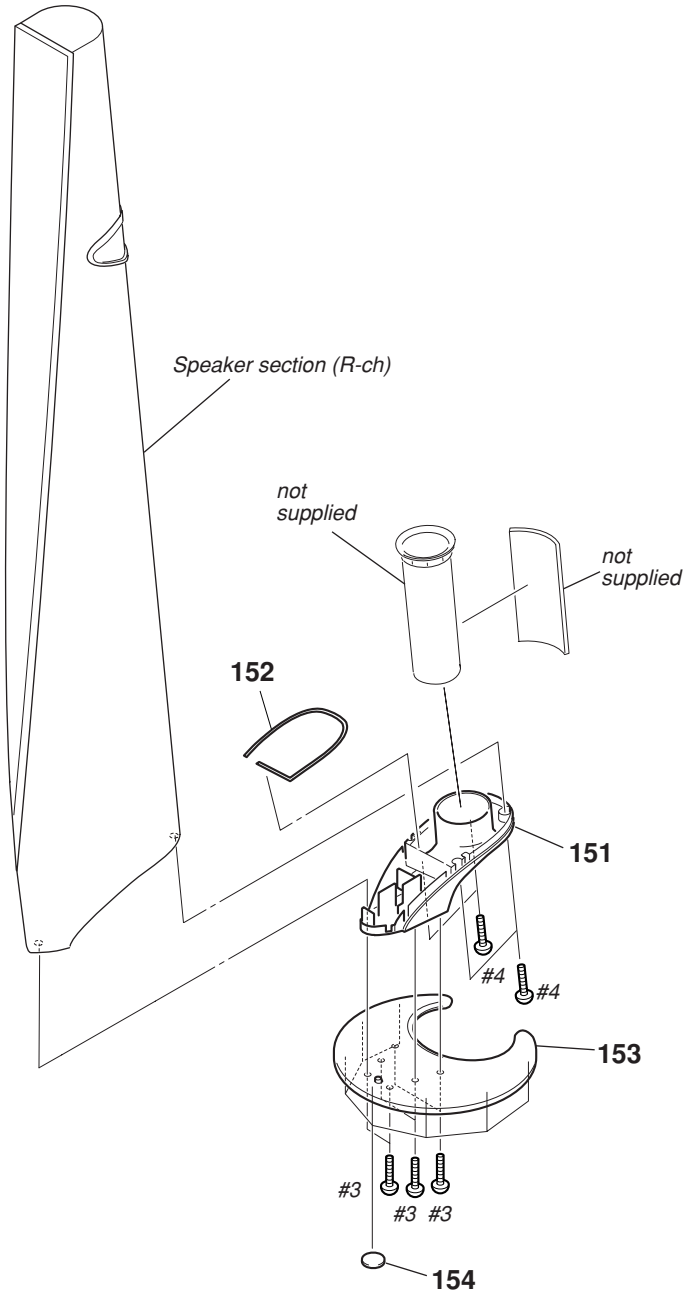


Ref. No.	Part No.	Description	Remark
101	A-4747-845-A	CONTROL BOARD, COMPLETE	
102	A-4747-846-A	POWER BOARD, COMPLETE (AEP,UK)	
102	A-4747-864-A	POWER BOARD, COMPLETE (US,CND)	
103	1-689-584-11	VOL CONTROL BOARD	
104	4-248-893-01	KNOB (VOLUME)	
105	4-250-006-01	BOTTOM (L)	
106	4-250-007-01	CUSHION (BOTTOM)	
107	1-696-169-22	CORD, POWER (AEP,UK)	
107	1-783-531-72	CORD, POWER (US,CND)	
108	4-217-350-11	STOPPER, CORD	
109	1-689-582-11	LED BOARD	

Ref. No.	Part No.	Description	Remark
110	4-250-008-01	LENS	
111	1-689-580-11	AC S/W BOARD	
112	4-248-895-01	KNOB (POWER)	
113	1-689-581-11	JACK BOARD	
114	1-689-583-11	SELECT BOARD	
115	4-248-894-01	KNOB (SELECT)	
116	6-700-752-01	IC ICE250A-SW	
#1	7-685-647-79	SCREW +BVTP 3X10 TYPE2 IT-3	
#6	7-682-562-04	SCREW +B 4X10	
#7	7-685-645-79	SCREW +BVTP 3X6 TYPE2 N-S	

5-4. BOTTOM SECTION

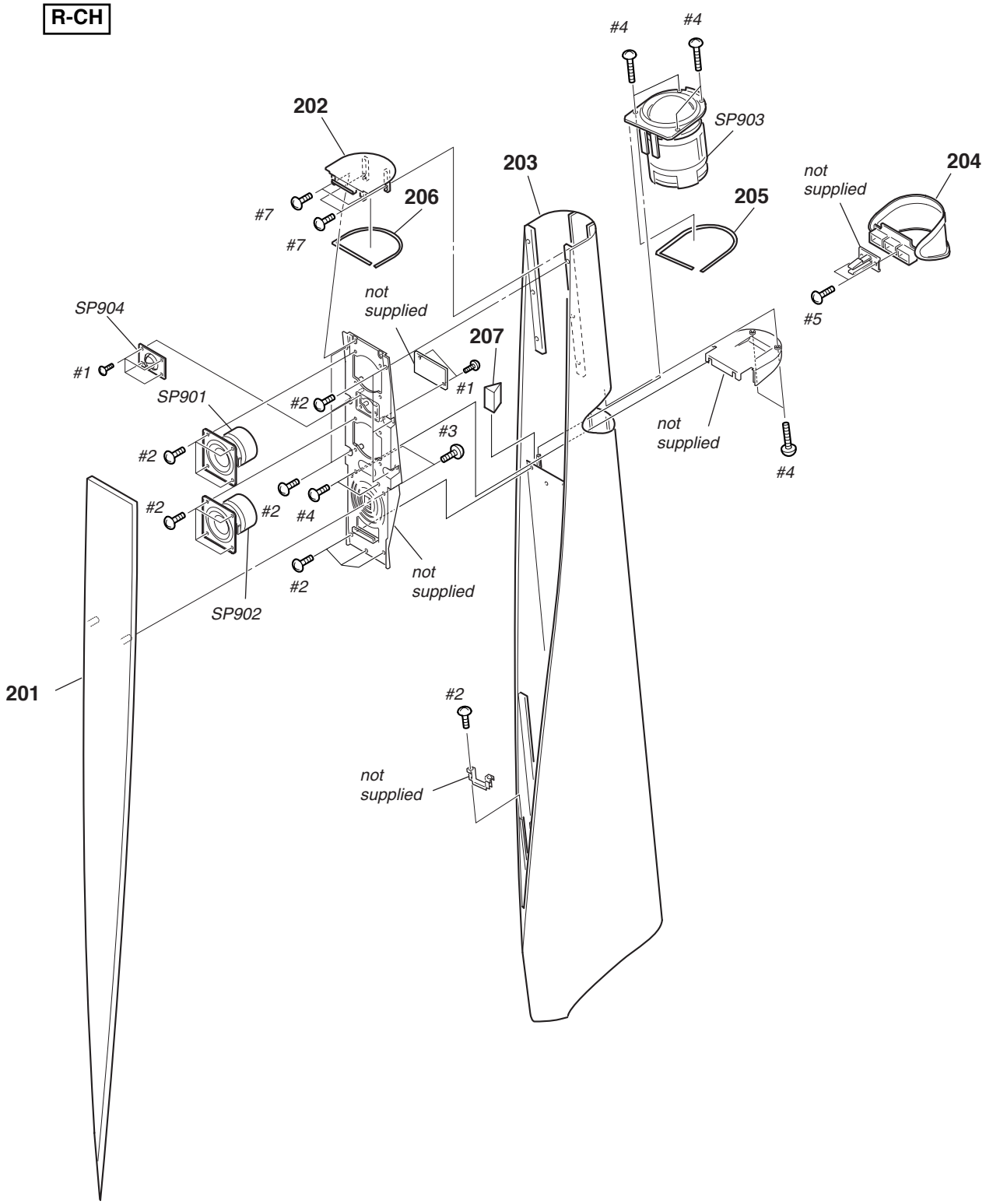
R-CH



Ref. No.	Part No.	Description	Remark
151	4-250-024-01	BOTTOM (R)	
152	4-250-007-01	CUSHION (BOTTOM)	
153	4-250-004-01	BASE (FRONT)	
154	4-250-005-01	FOOT (FRONT)	
#3	7-685-662-79	SCREW +BVTP 4X14 TYPE2 N-S	
#4	7-685-665-79	SCREW +BVTP 4X25 TYPE2 N-S	

5-5. SPEAKER SECTION

R-CH



Ref. No.	Part No.	Description	Remark
201	X-4955-918-1	FRAME (FRONT) ASSY, GRILL (US,CND)	
201	X-4955-982-1	FRAME (FRONT) ASSY, GRILL (AEP,UK)	
202	4-250-018-01	TOP PANEL	
203	4-250-012-11	SPEAKER CABINET (R)	
204	X-4955-919-1	RING ASSY	
205	4-250-016-01	CUSHION (SW)	
206	4-250-019-01	CUSHION (TOP)	
207	4-250-022-01	PACKING (SW)	
SP901	1-825-556-11	SPEAKER (8cm)	
SP902	1-825-556-11	SPEAKER (8cm)	

Ref. No.	Part No.	Description	Remark
SP903	1-825-557-11	SPEAKER (11cm)	
SP904	1-825-558-11	SPEAKER (2.5cm)	
#1	7-685-647-79	SCREW +BVTP 3X10 TYPE2 IT-3	
#2	7-685-660-19	SCREW +BVTP 4X10 TYPE2 N-S	
#3	7-685-662-79	SCREW +BVTP 4X14 TYPE2 N-S	
#4	7-685-665-79	SCREW +BVTP 4X25 TYPE2 N-S	
#5	7-685-661-19	SCREW +BVTP 4X12 TYPE2 N-S	
#7	7-685-645-79	SCREW +BVTP 3X6 TYPE2 N-S	

AC S/W | CONTROL

SECTION 6
ELECTRICAL PARTS LIST

NOTE :

- Due to standardization, replacements in the parts list may be different from the parts specified in the diagrams or the components used on the set.
- -XX, -X mean standardized parts, so they may have some difference from the original one.
- RESISTORS
  All resistors are in ohms
  METAL : Metal-film resistor
  METAL OXIDE :Metal oxide-film resistor
  F : nonflammable
- Items marked " * "are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- SEMICONDUCTORS
  In each case, u : μ , for example :
  uA.... : μ A.... , uPA.... : μ PA....
  uPB.... : μ PB.... , uPC.... : μ PC....
  uPD.... : μ PD....
- CAPACITORS
  uF : μ F
- COILS
  uH : μ H
- Abbreviation
  CND : Canadian model

When indicating parts by reference number, please include the board.

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

Les composants identifiés par une marque ⚠ sont critiques pour la sécurité.
Ne les remplacer que par une piéce portant le numéro spécifié.

Ref. No.	Part No.	Description			Remark
	1-689-580-11	AC S/W BOARD			
		**********			
	4-248-895-01	KNOB (POWER)			
		< CAPACITOR >			
⚠C1	1-117-703-11	CERAMIC	0.0047uF		250V
		< CONNECTOR >			
* CN801	1-568-226-11	PIN, CONNECTOR (3.96mm PITCH)2P			
* CN802	1-568-226-11	PIN, CONNECTOR (3.96mm PITCH)2P			
		< SWITCH >			
⚠S801	1-571-433-21	SWITCH, PUSH (POWER)			
**********					
	A-4747-845-A	CONTROL BOARD, COMPLETE			
		**********			
		< CAPACITOR >			
C101	1-162-286-21	CERAMIC	220PF	10%	50V
C102	1-162-286-21	CERAMIC	220PF	10%	50V
C103	1-162-286-21	CERAMIC	220PF	10%	50V
C104	1-162-286-21	CERAMIC	220PF	10%	50V
C105	1-126-964-11	ELECT	10uF	20%	50V
C106	1-162-306-11	CERAMIC	0.01uF	30%	16V
C107	1-162-306-11	CERAMIC	0.01uF	30%	16V
C108	1-136-165-00	FILM	0.1uF	5%	50V
C109	1-136-165-00	FILM	0.1uF	5%	50V
C110	1-126-964-11	ELECT	10uF	20%	50V
C111	1-126-964-11	ELECT	10uF	20%	50V
C112	1-126-964-11	ELECT	10uF	20%	50V
C113	1-126-933-11	ELECT	100uF	20%	16V
C114	1-126-933-11	ELECT	100uF	20%	16V
C115	1-126-968-11	ELECT	100uF	20%	50V
C116	1-126-968-11	ELECT	100uF	20%	50V
C117	1-136-165-00	FILM	0.1uF	5%	50V
C118	1-136-165-00	FILM	0.1uF	5%	50V
C207	1-128-551-11	ELECT	22uF	20%	25V
C208	1-104-661-91	ELECT	330uF	20%	16V
C301	1-126-947-11	ELECT	47uF	20%	25V
C302	1-126-947-11	ELECT	47uF	20%	25V
C303	1-131-679-31	FILM	0.01uF	5%	50V
C304	1-131-679-31	FILM	0.01uF	5%	50V
C305	1-131-687-31	FILM	0.039uF	5%	50V
C306	1-131-690-31	FILM	0.068uF	5%	50V
C308	1-136-165-00	FILM	0.1uF	5%	50V
C309	1-131-699-31	FILM	0.39uF	5%	50V
C310	1-131-699-31	FILM	0.39uF	5%	50V
C311	1-131-699-31	FILM	0.39uF	5%	50V
C312	1-131-687-31	FILM	0.039uF	5%	50V
C315	1-131-698-31	FILM	0.33uF	5%	50V
C316	1-131-698-31	FILM	0.33uF	5%	50V
C327	1-162-294-31	CERAMIC	0.001uF	10%	50V
C330	1-131-698-31	FILM	0.33uF	5%	50V
C331	1-126-964-11	ELECT	10uF	20%	50V
⚠C340	1-113-925-11	CERAMIC	0.01uF	20%	250V
C401	1-128-551-11	ELECT	22uF	20%	25V
		< CONNECTOR >			
CN202	1-565-731-11	PLUG, CONNECTOR (2.5mm) 5P			
* CN901	1-506-995-11	PIN, CONNECTOR (PC BOARD) 13P			
CN904	1-564-320-00	PIN, CONNECTOR (3.96mm PITCH)2P			
CN905	1-564-320-00	PIN, CONNECTOR (3.96mm PITCH)2P			
* CN908	1-506-984-11	PIN, CONNECTOR (PC BOARD) 2P			
* CN909	1-506-985-11	PIN, CONNECTOR (PC BOARD) 3P			
* CN911	1-506-987-11	PIN, CONNECTOR (PC BOARD) 5P			
		< DIODE >			
D101	8-719-991-33	DIODE 1SS133T-77			
D102	8-719-991-33	DIODE 1SS133T-77			
D103	8-719-991-33	DIODE 1SS133T-77			
D104	8-719-991-33	DIODE 1SS133T-77			
D105	8-719-991-33	DIODE 1SS133T-77			
D106	8-719-991-33	DIODE 1SS133T-77			
D207	8-719-991-33	DIODE 1SS133T-77			
D208	8-719-991-33	DIODE 1SS133T-77			
D209	8-719-991-33	DIODE 1SS133T-77			
D210	8-719-991-33	DIODE 1SS133T-77			
D211	8-719-991-33	DIODE 1SS133T-77			
D330	8-719-991-33	DIODE 1SS133T-77			
D331	8-719-991-33	DIODE 1SS133T-77			
		< TERMINAL >			
EP101	1-537-770-21	TERMINAL BOARD, GROUND			
		< IC >			
IC101	8-759-989-89	IC BA4558N			
IC102	8-759-989-89	IC BA4558N			
IC201	8-759-989-89	IC BA4558N			
IC301	8-759-989-89	IC BA4558N			
IC302	8-759-989-89	IC BA4558N			
IC303	8-759-989-89	IC BA4558N			

Ref. No.	Part No.	Description			Remark
		< TRANSISTOR >			
Q101	8-729-029-86	TRANSISTOR DTC124ESA			
Q102	8-729-119-76	TRANSISTOR 2SA1175-HFE			
Q103	8-729-029-86	TRANSISTOR DTC124ESA			
Q104	8-729-900-63	TRANSISTOR DTA124ES			
Q105	8-729-119-79	TRANSISTOR 2SC2785-FEK			
Q203	8-729-029-86	TRANSISTOR DTC124ESA			
Q204	8-729-119-76	TRANSISTOR 2SA1175-HFE			
Q205	8-729-029-86	TRANSISTOR DTC124ESA			
Q206	8-729-900-63	TRANSISTOR DTA124ES			
Q207	8-729-900-63	TRANSISTOR DTA124ES			
Q302	8-729-119-79	TRANSISTOR 2SC2785-FEK			
Q314	8-729-119-79	TRANSISTOR 2SC2785-FEK			
		< RESISTOR >			
R101	1-260-107-11	CARBON	4.7K	5%	1/2W
R103	1-260-107-11	CARBON	4.7K	5%	1/2W
R104	1-249-421-11	CARBON	2.2K	5%	1/4W F
R106	1-249-421-11	CARBON	2.2K	5%	1/4W F
R107	1-249-433-11	CARBON	22K	5%	1/4W
R108	1-249-433-11	CARBON	22K	5%	1/4W
R111	1-249-433-11	CARBON	22K	5%	1/4W
R112	1-249-433-11	CARBON	22K	5%	1/4W
R113	1-249-421-11	CARBON	2.2K	5%	1/4W F
R114	1-249-417-11	CARBON	1K	5%	1/4W F
R116	1-249-413-11	CARBON	470	5%	1/4W F
R117	1-249-437-11	CARBON	47K	5%	1/4W
R118	1-249-421-11	CARBON	2.2K	5%	1/4W F
R119	1-249-424-11	CARBON	3.9K	5%	1/4W F
R120	1-249-441-11	CARBON	100K	5%	1/4W
R123	1-249-429-11	CARBON	10K	5%	1/4W
R124	1-249-429-11	CARBON	10K	5%	1/4W
R125	1-249-431-11	CARBON	15K	5%	1/4W
R126	1-249-433-11	CARBON	22K	5%	1/4W
R127	1-249-435-11	CARBON	33K	5%	1/4W
R129	1-247-887-00	CARBON	220K	5%	1/4W
R131	1-249-441-11	CARBON	100K	5%	1/4W
R132	1-249-441-11	CARBON	100K	5%	1/4W
R134	1-249-441-11	CARBON	100K	5%	1/4W
R135	1-249-441-11	CARBON	100K	5%	1/4W
R136	1-247-843-11	CARBON	3.3K	5%	1/4W
R137	1-249-425-11	CARBON	4.7K	5%	1/4W F
R138	1-249-425-11	CARBON	4.7K	5%	1/4W F
R139	1-247-843-11	CARBON	3.3K	5%	1/4W
R203	1-249-417-11	CARBON	1K	5%	1/4W F
R204	1-247-895-91	CARBON	470K	5%	1/4W
R205	1-247-881-00	CARBON	120K	5%	1/4W
R206	1-249-417-11	CARBON	1K	5%	1/4W F
R207	1-249-437-11	CARBON	47K	5%	1/4W
R208	1-249-437-11	CARBON	47K	5%	1/4W
R209	1-249-437-11	CARBON	47K	5%	1/4W
R210	1-249-417-11	CARBON	1K	5%	1/4W F
R211	1-247-903-00	CARBON	1M	5%	1/4W
R212	1-249-433-11	CARBON	22K	5%	1/4W
R213	1-249-416-11	CARBON	820	5%	1/4W F
R214	1-249-420-11	CARBON	1.8K	5%	1/4W F
R301	1-249-425-11	CARBON	4.7K	5%	1/4W F
R302	1-249-425-11	CARBON	4.7K	5%	1/4W F
R305	1-249-435-11	CARBON	33K	5%	1/4W
R306	1-249-425-11	CARBON	4.7K	5%	1/4W F
R307	1-249-429-11	CARBON	10K	5%	1/4W
R308	1-249-421-11	CARBON	2.2K	5%	1/4W F
R309	1-249-435-11	CARBON	33K	5%	1/4W
R310	1-249-424-11	CARBON	3.9K	5%	1/4W F
R311	1-249-424-11	CARBON	3.9K	5%	1/4W F
R314	1-249-431-11	CARBON	15K	5%	1/4W
R315	1-249-430-11	CARBON	12K	5%	1/4W
R316	1-249-429-11	CARBON	10K	5%	1/4W
R317	1-249-421-11	CARBON	2.2K	5%	1/4W F
R321	1-249-427-11	CARBON	6.8K	5%	1/4W F
R330	1-249-433-11	CARBON	22K	5%	1/4W
R331	1-249-420-11	CARBON	1.8K	5%	1/4W F
R332	1-249-433-11	CARBON	22K	5%	1/4W
R333	1-247-887-00	CARBON	220K	5%	1/4W
R334	1-249-417-11	CARBON	1K	5%	1/4W F
R401	1-249-417-11	CARBON	1K	5%	1/4W F
**********					
	1-689-581-11	JACK BOARD			
		*********			
		< JACK >			
J101	1-794-034-11	JACK, PIN 1P (SUB WOOFER IN)			
**********					
	1-689-582-11	LED BOARD			
		********			
		< DIODE >			
D402	8-719-061-31	DIODE SML72420CTH8F (POWER)			
**********					
	A-4747-846-A	POWER BOARD, COMPLETE (AEP,UK)			
	A-4747-864-A	POWER BOARD, COMPLETE (US,CND)			
		**********			
	7-685-647-79	SCREW +BVTP 3X10 TYPE2 N-S			
		< CAPACITOR >			
⚠C3	1-113-924-11	CERAMIC	0.0047uF	20%	250V
C201	1-104-666-11	ELECT	220uF	20%	25V
C202	1-104-666-11	ELECT	220uF	20%	25V
C203	1-126-964-11	ELECT	10uF	20%	50V
C204	1-126-964-11	ELECT	10uF	20%	50V
C205	1-126-964-11	ELECT	10uF	20%	50V
C206	1-126-964-11	ELECT	10uF	20%	50V
C209	1-164-159-21	CERAMIC	0.1uF		50V
C210	1-164-159-21	CERAMIC	0.1uF		50V
C701	1-126-934-11	ELECT	220uF	20%	10V
C702	1-126-948-11	ELECT	100uF	20%	35V
C703	1-126-963-11	ELECT	4.7uF	20%	50V
C704	1-126-948-11	ELECT	100uF	20%	35V
⚠C901	1-117-916-51	FILM	0.22uF	10%	275V
⚠C902	1-113-915-11	CERAMIC	0.001uF	20%	250V
⚠C903	1-113-915-11	CERAMIC	0.001uF	20%	250V
⚠C904	1-113-915-11	CERAMIC	0.001uF	20%	250V
⚠C905	1-117-916-51	FILM	0.22uF	10%	275V
⚠C910	1-137-994-31	ELECT	820uF	20%	200V (US,CND)
⚠C910	1-165-639-11	ELECT	470uF	20%	400V (AEP,UK)

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety. Replace only with part number specified.	Les composants identifiés par une marque ⚠ sont critiques pour la sécurité. Ne les remplacer que par une piéce portant le numéro spécifié.

POWER

Ref. No.	Part No.	Description			Remark
⚠C911	1-165-706-91	FILM	0.01uF	5%	630V
C912	1-126-947-11	ELECT	47uF	20%	25V
C913	1-162-290-31	CERAMIC	470PF	10%	50V (US,CND)
C913	1-162-286-21	CERAMIC	220PF	10%	50V (AEP,UK)
⚠C914	1-136-555-11	FILM	0.0022uF	5%	630V (US,CND)
⚠C914	1-125-893-11	FILM	680PF	3%	1.5KV (AEP,UK)
C915	1-162-290-31	CERAMIC	470PF	10%	50V (AEP,UK)
⚠C916	1-117-699-11	CERAMIC	0.001uF	99%	250V
⚠C917	1-136-559-11	FILM	0.0047uF	5%	630V (US,CND)
⚠C917	1-117-832-11	FILM	4700PF	3%	1.5KV (AEP,UK)
C918	1-115-361-11	ELECT (BLOCK)	6800uF	20%	50V
C919	1-126-951-11	ELECT	470uF	20%	35V
C920	1-126-951-11	ELECT	470uF	20%	35V
C922	1-136-153-00	FILM	0.01uF	5%	50V
C932	1-136-165-00	FILM	0.1uF	5%	50V
C933	1-136-165-00	FILM	0.1uF	5%	50V
C934	1-126-935-11	ELECT	470uF	20%	16V
C935	1-126-935-11	ELECT	470uF	20%	16V
C936	1-136-165-00	FILM	0.1uF	5%	50V
C937	1-136-165-00	FILM	0.1uF	5%	50V
C938	1-136-165-00	FILM	0.1uF	5%	50V
C939	1-136-165-00	FILM	0.1uF	5%	50V
C941	1-161-494-00	CERAMIC	0.022uF		25V
C942	1-161-494-00	CERAMIC	0.022uF		25V
C951	1-164-159-21	CERAMIC	0.1uF		50V
C952	1-164-159-21	CERAMIC	0.1uF		50V
C953	1-164-159-21	CERAMIC	0.1uF		50V
C954	1-162-294-31	CERAMIC	0.001uF	10%	50V (US,CND)
C955	1-162-294-31	CERAMIC	0.001uF	10%	50V (US,CND)
C956	1-162-294-31	CERAMIC	0.001uF	10%	50V (US,CND)
C957	1-162-294-31	CERAMIC	0.001uF	10%	50V (US,CND)
C958	1-162-294-31	CERAMIC	0.001uF	10%	50V (US,CND)

< CONNECTOR >

CN201	1-565-731-11	PLUG, CONNECTOR (2.5mm) 5P
CN212	1-564-321-00	PIN, CONNECTOR (3.96mm PITCH)2P
CN902	1-564-320-00	PIN, CONNECTOR (3.96mm PITCH)2P
CN903	1-564-320-00	PIN, CONNECTOR (3.96mm PITCH)2P
* CN906	1-564-705-11	PIN, CONNECTOR (SMALL TYPE) 3P (US,CND)
* CN906	1-506-985-11	PIN, CONNECTOR (PC BOARD) 3P (AEP,UK)

< DIODE >

D201	8-719-970-02	DIODE 1SR139-400
D202	8-719-970-02	DIODE 1SR139-400
D203	8-719-970-02	DIODE 1SR139-400
D204	8-719-970-02	DIODE 1SR139-400
D205	8-719-921-88	DIODE MTZJ-13B
D206	8-719-921-88	DIODE MTZJ-13B
D701	8-719-991-33	DIODE 1SS133T-77
D807	8-719-991-33	DIODE 1SS133T-77
⚠D901	8-719-022-92	DIODE RBV-604 (US,CND)
⚠D901	8-719-084-58	DIODE RBV-406 (AEP,UK)
⚠D902	8-719-080-26	DIODE SARS01V0
D903	8-719-075-11	DIODE AG01ZV0
D904	8-719-110-17	DIODE RD10ESB2
D905	8-719-110-53	DIODE RD20ESB2
D906	8-719-075-11	DIODE AG01ZV0
D907	8-719-075-11	DIODE AG01ZV0
D908	8-719-075-11	DIODE AG01ZV0
D909	8-719-058-38	DIODE FMN-G12S (US,CND)
D909	8-719-049-98	DIODE FML-G14S (AEP,UK)
D910	8-719-064-47	DIODE RN1Z-LF-B1
D911	8-719-064-47	DIODE RN1Z-LF-B1
D919	8-719-991-33	DIODE 1SS133T-77
D920	8-719-991-33	DIODE 1SS133T-77
D921	8-719-991-33	DIODE 1SS133T-77
D922	8-719-043-76	DIODE AK04V0

< TERMINAL >

EP902	1-537-770-21	TERMINAL BOARD, GROUND
EP903	1-537-770-21	TERMINAL BOARD, GROUND
EP905	1-537-770-21	TERMINAL BOARD, GROUND

< FUSE >

⚠F901	1-532-748-11	FUSE, GLASS TUBE (6.3A/125V) (US,CND)
⚠F901	1-532-350-00	FUSE (T4AL/250V) (AEP,UK)
⚠F902	1-576-048-11	FUSE (10A/125V) (US,CND)
⚠F902	1-533-949-11	FUSE (T8AL/250V)(AEP,UK)

< FERRITE BEAD >

FB901	1-412-473-21	INDUCTOR 0uH

< FUSE HOLDER >

FH901	1-533-313-11	FUSE HOLDER
FH902	1-533-313-11	FUSE HOLDER
FH903	1-533-313-11	FUSE HOLDER
FH904	1-533-313-11	FUSE HOLDER

< IC >

⚠IC901	6-700-162-01	IC STR-F6426S (US,CND)
⚠IC901	8-749-017-79	IC STR-F6676 (AEP,UK)
IC902	8-749-019-49	IC SE040
IC906	8-759-646-53	IC KIA7812API
IC907	8-759-604-45	IC M5F79M12L

< COIL >

L903	1-419-667-11	INDUCTOR 10uH
L904	1-408-080-00	INDUCTOR 100uH
L905	1-408-080-00	INDUCTOR 100uH

< LINE FILTER >

⚠LF901	1-456-082-11	COIL, LINE FILTER (US,CND)
⚠LF901	1-456-081-11	COIL, LINE FILTER (AEP,UK)

< PHOTO COUPLER >

PC901	8-749-019-04	PHOTO COUPLER TLP421

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Ref. No.	Part No.	Description			Remark
		< TRANSISTOR >			
Q201	8-729-036-89	TRANSISTOR KTC3198GR-A			
Q202	8-729-037-02	TRANSISTOR KTA1266Y-AT			
Q701	8-729-029-86	TRANSISTOR DTC124ESA			
Q703	8-729-178-42	TRANSISTOR 2SC2784-F			
Q704	8-729-119-79	TRANSISTOR 2SC2785-FEK			
Q705	8-729-029-86	TRANSISTOR DTC124ESA			
Q901	8-729-142-51	TRANSISTOR 2SD1616A-TP-LK			
		< RESISTOR >			
R201	1-249-429-11	CARBON	10K	5%	1/4W
R202	1-249-429-11	CARBON	10K	5%	1/4W
R216	1-249-393-11	CARBON	10	5%	1/4W F
R217	1-249-393-11	CARBON	10	5%	1/4W F
R701	1-215-869-11	METAL OXIDE	1K	5%	1W
R702	1-247-887-00	CARBON	220K	5%	1/4W
R703	1-249-441-11	CARBON	100K	5%	1/4W
R704	1-249-433-11	CARBON	22K	5%	1/4W
R705	1-249-441-11	CARBON	100K	5%	1/4W
R706	1-249-441-11	CARBON	100K	5%	1/4W
R707	1-249-427-11	CARBON	6.8K	5%	1/4W F
R708	1-249-427-11	CARBON	6.8K	5%	1/4W F
R709	1-249-433-11	CARBON	22K	5%	1/4W
⚠R902	1-219-237-11	SOLID	3.3M	20%	1/2W (AEP,UK)
⚠R904	1-215-901-00	METAL OXIDE	33K	5%	2W (US,CND)
⚠R904	1-218-642-11	METAL OXIDE	100K	5%	1W (AEP,UK)
⚠R905	1-247-895-91	CARBON	470K	5%	1/4W
⚠R906	1-247-807-31	CARBON	100	5%	1/4W
R907	1-249-429-11	CARBON	10K	5%	1/4W
R908	1-249-393-11	CARBON	10	5%	1/4W F
R909	1-249-421-11	CARBON	2.2K	5%	1/4W F
R910	1-244-317-71	METAL	0.18	5%	2W (US,CND)
R910	1-240-858-71	METAL	0.27	5%	2W (AEP,UK)
R911	1-219-984-51	METAL	0.1	5%	2W (US,CND)
R911	1-244-398-71	METAL	0.3	5%	2W (AEP,UK)
R912	1-249-415-11	CARBON	680	5%	1/4W F
R913	1-249-426-11	CARBON	5.6K	5%	1/4W
R914	1-249-419-11	CARBON	1.5K	5%	1/4W F
R915	1-249-417-11	CARBON	1K	5%	1/4W F
R916	1-249-420-11	CARBON	1.8K	5%	1/4W F
⚠R917	1-249-381-11	CARBON	1	5%	1/4W F
⚠R918	1-249-381-11	CARBON	1	5%	1/4W F
⚠R920	1-247-807-31	CARBON	100	5%	1/4W
		< RELAY >			
RY701	1-515-920-11	RELAY (24V)			
⚠RY801	1-755-458-11	RELAY			
		< TRANSFORMER >			
⚠T901	1-437-232-11	TRANSFORMER, POWER (US,CND)			
⚠T901	1-437-233-11	TRANSFORMER, POWER (AEP,UK)			
⚠T902	1-437-793-11	TRANSFORMER, POWER (US,CND)			
⚠T902	1-437-794-11	TRANSFORMER, POWER (AEP,UK)			
		< THERMISTOR >			
⚠THP901	1-803-916-11	THERMISTOR, NTC			

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Ref. No.	Part No.	Description	Remark
	1-689-583-11	SELECT BOARD	
		**********	
	4-248-894-01	KNOB (SELECT)	
		< SWITCH >	
S101	1-762-115-11	SWITCH, PUSH (1 KEY) (INPUT SELECTOR)	
S102	1-762-115-11	SWITCH, PUSH (1 KEY) (POWER SAVE)	
S103	1-762-115-11	SWITCH, PUSH (1 KEY) (PHASE)	
S104	1-762-115-11	SWITCH, PUSH (1 KEY) (BOOST)	

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	1-689-584-11	VOL CONTROL BOARD	
		**********	
	4-248-893-01	KNOB (VOLUME)	
		< CONNECTOR >	
* CN910	1-506-999-11	PIN, CONNECTOR (PC BOARD) 3P	
* CN912	1-566-693-11	PIN, CONNECTOR (3.96mm PITCH)2P	
		< VARIABLE RESISTOR >	
VR101	1-225-826-11	RES, VAR, CARBON 20K (SW LEVEL)	

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		MISCELLANEOUS	
		**********	
57	1-696-169-22	CORD, POWER (AEP,UK)	
57	1-783-531-72	CORD, POWER (US,CND)	
SP101	1-825-556-11	SPEAKER (8cm)	
SP102	1-825-556-11	SPEAKER (8cm)	
SP103	1-825-557-11	SPEAKER (11cm)	
SP104	1-825-558-11	SPEAKER (2.5cm)	
SP901	1-825-556-11	SPEAKER (8cm)	
SP902	1-825-556-11	SPEAKER (8cm)	
SP903	1-825-557-11	SPEAKER (11cm)	
SP904	1-825-558-11	SPEAKER (2.5cm)	

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		ACCESSORIES	
		**********	
	1-770-019-51	ADAPTOR, CONVERSION PLUG (UK)	
	1-827-595-11	CORD (WITH CONNECTION) (4P) (5m)	(For SUBWOOFER)
	1-827-596-11	CORD (WITH CONNECTION) (PIN-PLUG) (5m)	
	4-249-491-11	MANUAL, INSTRUCTION (ENGLISH, FRENCH)	(AEP,UK)
	4-249-491-21	MANUAL, INSTRUCTION (SPANISH, GERMAN)	(AEP)
	4-249-491-31	MANUAL, INSTRUCTION (DUTCH, ITALIAN)	(AEP)
	4-249-491-41	MANUAL, INSTRUCTION (SWEDISH, POLISH)	(AEP)
	4-249-491-61	MANUAL, INSTRUCTION (ENGLISH, FRENCH)	(US,CND)

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety. Replace only with part number specified.	Les composants identifiés par une marque ⚠ sont critiques pour la sécurité. Ne les remplacer que par une piéce portant le numéro spécifié.

REVISION HISTORY

Clicking the version allows you to jump to the revised page.
Also, clicking the version at the upper right on the revised page allows you to jump to the next revised page.

Ver.	Date	Description of Revision
1.0	2003.07	New